

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): An apparatus for depositing particulate matter onto a supply of absorbent core fibrous substrate material moving in a machine direction comprising:

- a feed tray having an inlet for receiving a supply of particulate matter;
- a shuttle pan slideably positioned to form at least part of a lower pan of the feed tray;
- the shuttle pan having an outlet edge located proximal the supply of absorbent core fibrous substrate material, the outlet edge being ~~offset in the machine direction from the feed tray inlet, and being~~ located so that the supply of particulate matter passes over the outlet edge to exit the feed tray and be deposited on the supply of absorbent core fibrous substrate material;
- the shuttle pan having a range of motion comprising a forward stroke and a backward stroke, wherein during the forward stroke the outlet edge follows the supply of absorbent core fibrous substrate material; and
- a mechanism for moving the shuttle pan through its range of motion;
- wherein the supply of absorbent core fibrous material is conveyed by a conveying mechanism that is offset from the outlet edge by an offset distance; and
- wherein the conveying mechanism is not substantially parallel to the shuttle pan.

Claim 2 (original): The apparatus of claim 1, wherein the supply of particulate matter is a supply of superabsorbent particles.

Claim 3 (original): The apparatus of claim 1, wherein the supply of absorbent core fibrous substrate material comprises a supply of cellulose acetate tow.

Claim 4 (original): The apparatus of claim 1, wherein the shuttle pan forms substantially

all of the lower pan of the feed tray.

Claim 5 (original): The apparatus of claim 1, wherein the supply of absorbent core fibrous substrate material is conveyed by a conveying mechanism that is offset from the outlet edge by an offset distance.

Claim 6 (original): The apparatus of claim 5, wherein the offset distance is from about 0.25 inches to about 4.00 inches.

Claim 7 (original): The apparatus of claim 5, wherein the offset distance is from about 0.375 inches to about 1.00 inch.

Claim 8 (currently amended): The apparatus of claim 5, wherein the offset distance is ~~from~~ about 0.50 inches.

Claim 9 (original): The apparatus of claim 5, wherein the conveying mechanism is substantially parallel to the shuttle pan.

Claim 10 (previously presented): An apparatus for depositing particulate matter onto a supply of absorbent core fibrous substrate material moving in a machine direction comprising:

- a feed tray having an inlet for receiving a supply of particulate matter;

- a shuttle pan slideably positioned to form at least part of a lower pan of the feed tray;

- the shuttle pan having an outlet edge located proximal the supply of absorbent core fibrous substrate material, the outlet edge being located so that the supply of particulate matter passes over the outlet edge to exit the feed tray and be deposited on the supply of absorbent core fibrous substrate material;

- the shuttle pan having a range of motion comprising a forward stroke and a backward stroke, wherein during the forward stroke the outlet edge follows the supply of absorbent core fibrous substrate material; and

a mechanism for moving the shuttle pan through its range of motion;
wherein the supply of absorbent core fibrous material is conveyed by a conveying mechanism that is offset from the outlet edge by an offset distance; and
wherein the conveying mechanism is not substantially parallel to the shuttle pan;
at one position of the range of motion the outlet edge is offset from the conveying mechanism by a maximum offset distance;
at another position of the range of motion the outlet edge is offset from the conveying mechanism by a minimum offset distance; and
the maximum offset distance is not more than about 300% of the minimum offset distance.

Claim 11 (previously presented): An apparatus for depositing particulate matter onto a supply of absorbent core fibrous substrate material moving in a machine direction comprising:

a feed tray having an inlet for receiving a supply of particulate matter;
a shuttle pan slideably positioned to form at least part of a lower pan of the feed tray;
the shuttle pan having an outlet edge located proximal the supply of absorbent core fibrous substrate material, the outlet edge being located so that the supply of particulate matter passes over the outlet edge to exit the feed tray and be deposited on the supply of absorbent core fibrous substrate material;
the shuttle pan having a range of motion comprising a forward stroke and a backward stroke, wherein during the forward stroke the outlet edge follows the supply of absorbent core fibrous substrate material; and
a mechanism for moving the shuttle pan through its range of motion;
wherein the supply of absorbent core fibrous material is conveyed by a conveying mechanism that is offset from the outlet edge by an offset distance; and
wherein the conveying mechanism is a combining drum.

Claim 12 (original): The apparatus of claim 1, wherein the range of motion traverses a stroke distance of from about 2 inches to about 13 inches.

Claim 13 (previously presented): The apparatus of claim 1, wherein the range of motion traverses a stroke distance of from about 4 inches to about 11 inches.

Claim 14 (previously presented): The apparatus of claim 1, wherein the range of motion traverses a stroke distance of from about 6 inches to about 9 inches.

Claim 15 (previously presented): The apparatus of claim 1, wherein the feed tray is a vibratory feed tray.

Claim 16 (previously presented): The apparatus of claim 1, wherein the feed tray is a fixed feed tray.

Claim 17 (previously presented): The apparatus of claim 16, further comprising a metered flow device for conveying particulate matter to the inlet.

Claim 18 (previously presented): The apparatus of claim 17, wherein the metered flow device is an auger-type feeder.

Claim 19 (previously presented): The apparatus of claim 1, wherein the amount of particulate matter deposited from the feed tray is controlled by a loss-in-weight control system.

Claims 20-33(canceled)

Claim 34 (previously presented): The apparatus of claim 10, wherein the supply of particulate matter is a supply of absorbent particles.

Claim 35 (previously presented): The apparatus of claim 10, wherein the supply of absorbent core fibrous substrate material comprises a supply of cellulose acetate tow.

Claim 36 (previously presented): The apparatus of claim 10, wherein the shuttle pan forms substantially all of the lower pan of the feed tray.

Claim 37 (previously presented): The apparatus of claim 10, wherein the range of motion traverses a stroke distance of from about 2 inches to about 13 inches.

Claim 38 (previously presented): The apparatus of claim 10, wherein the range of motion traverses a stroke distance of from about 4 inches to about 11 inches.

Claim 39 (previously presented): The apparatus of claim 10, wherein the range of motion traverses a stroke distance of from about 6 inches to about 9 inches.

Claim 40 (previously presented): The apparatus of claim 10, wherein the feed tray is a vibratory feed tray.

Claim 41 (previously presented): The apparatus of claim 10, wherein the feed tray is a fixed feed tray

Claim 42 (previously presented): The apparatus of claim 41, further comprising a metered flow device for conveying particulate matter to the inlet.

Claim 43 (previously presented): The apparatus of claim 42, wherein the metered flow device is an auger-type feeder.

Claim 44 (previously presented): The apparatus of claim 10, wherein the amount of particulate matter deposited from the feed tray is controlled by a loss-in-weight control system.

Claim 45 (previously presented): The apparatus of claim 11, wherein the supply of particulate matter is a supply of superabsorbent particles.

Claim 46 (previously presented): The apparatus of claim 11, wherein the supply of absorbent core fibrous substrate material comprises a supply of cellulose acetate tow.

Claim 47 (previously presented): The apparatus of claim 11, wherein the shuttle pan forms substantially all of the lower pan of the feed tray.

Claim 48 (previously presented): The apparatus of claim 11, wherein the offset distance is from about 0.25 inches to about 4.00 inches.

Claim 49 (previously presented): The apparatus of claim 11, wherein the offset distance is from about 0.375 inches to about 1.00 inch.

Claim 50 (currently amended): The apparatus of claim 11, wherein the offset distance is ~~from~~ about 0.50 inches.

Claim 51 (previously presented): The apparatus of claim 11, wherein the conveying mechanism is substantially parallel to the shuttle pan.

Claim 52 (previously presented): The apparatus of claim 11, wherein the range of motion traverses a stroke distance of from about 2 inches to about 13 inches.

Claim 53 (previously presented): The apparatus of claim 11, wherein the range of motion traverses a stroke distance of from about 4 inches to about 11 inches.

Claim 54 (previously presented): The apparatus of claim 11, wherein the range of motion traverses a stroke distance of from about 6 inches to about 9 inches.

Claim 55 (previously presented): The apparatus of claim 11, wherein feed tray is a vibratory feed tray.

Claim 56 (previously presented): The apparatus of claim 11, wherein the feed tray is a fixed feed tray.

Claim 57 (previously presented): The apparatus of claim 56, further comprising a metered flow device for conveying particulate matter to the inlet.

Claim 58 (previously presented): The apparatus of claim 57, wherein the metered flow device is an auger-type feeder.

Claim 59 (previously presented): The apparatus of claim 11, wherein the amount of particulate matter deposited from the feed tray is controlled by a loss-in-weight control system.